

KORENYAKO, A.S.; KREMENSHTYIN, L.I.; PETROVSKIY, S.D.; OVSIYENKO,  
G.M.; BAKHANOV, V.Ye.; Prinsipal uchastiye YEMTS, P.M.;  
IVANOV, A.P., prof., retsenzent

[Preparation of a course project on the theory of mechanisms and machines] Kursovoe proektirovanie po teorii mekhanizmov i mashin. [By] A.S.Koreniako i dr. Izd.4., perer. Moskva, Leningrad, 1964. 324 p. (MIRA 17:9)

KORENIEVICH, N.N.; KOTOVICH, A.F.

Problem of intra-arterial blood transfusion. Probl. gemat. i perel.  
Sov. 5 no. 11:53-55 '60. (MIRA 14:1)

(BLOOD—TRANSFUSION)

KORENYI, B. Andras, dr.; KISBAN, Gabriella, dr.; BARTOK, Istvan, dr.

Contribution to the pathology of multiple primary malignant tumors. Magy. onkol. 7 no.3:177-185 5'63.

1. Szegedi Orvostudományi Egyetem, Kóronctani és Kórsvovettani Intezet.

(STOMACH NEOPLASMS) (LUNG NEOPLASMS)  
(INTESTINAL NEOPLASMS) (BREAST NEOPLASMS)  
(UTERINE NEOPLASMS) (BLADDER NEOPLASMS)  
(PANGREATIC NEOPLASMS) (NEOPLASM METASTASIS)  
(PATHOLOGY)

KORENYI, Gyula, okleveles mernok, MAV muszaki tanacsos, fomernek;  
MISTETH, Endre, okleveles mernok

Design and construction of the Tatabanya underpass on the  
No.1 highway. Melyepitestud szemle 13 no.5:208-217 My '63.

1. MAV Hidepitesi Fonokseg, Budapest (for Korenyi).
2. Vizugyi Tervezo Vallalat osztalyvezatoje (for Misteth).

KORENYL, M.

"For a more economic wintering!

p. 4 (Allami Gazdaszag) Vol. 9, no. 12, Dec. 1957  
Budapest, Hungary

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

KORENYUGIN, G. T.

Practice in computing collective farm production costs. Vop.ekon.  
no.5:125-129 My '56. (MIRA 9:8)

1. Kolkhos "Trudovoy", Kazakhskoy SSR.  
(Collective farms--Accounting)

KORENYUGIN, Georgiy Tikhonovich; TERSECHENKO, N.I., red.; ZUBRILINA,  
Z.P., tekhn. red.

[Experience in organizing collective farm accounting] Opyt  
organizatsii ucheta v kolkhose. Moskva, Gos. izd-vo sel'khoz.  
lit-ry, 1958. 630 p. (MIRA 11:12)  
(Collective farms--Accounting)

RUSAKOV, G.K., kand.sel'skokhoz.nauk; SUBBOTIN, V.P., kand.ekon.nauk;  
LIPATOVA, V.A., kand.ekon.nauk; ARINA, A.Ye., kand.sel'skokhoz.  
nauk; KORENYUGIN, G.T., mladshiy nauchnyy sotrudnik; PANKOVA,  
K.I., aspirantka; KLADCHIKOV, S.M., otv.red.; KOLYCHEV, L.I.,  
red.; SVYADOSITS, Yu.I., red.

[Accounting on collective farms when business accounting is in  
use] Bukhgalterakii uchet v kolkhozakh pri vnedrenii khozrasche-  
ta. Moskva, 1960. 246 p. (MIRA 13:5)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut ekonomiki  
sel'skogo khozyaystva. 2. Zaveduyushchiy otdelom ekonomiki i orga-  
nizatsii proizvodstva kolkhozov Vsesoyuznogo nauchno-issledovatel'sko-  
go instituta ekonomiki sel'skogo khozyaystva (for Rusakov). 3. Otdel  
ekonomiki i organizatsii proizvodstva kolkhozov Vsesoyuznogo nauchno-  
issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva (for  
Subbotin, Lipatova, Arina). 4. Kashiirakiy opornyy punkt Vsesoyuznogo  
nauchno-issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva  
(for Korenyugin). 5. Vsesoyuznyy nauchno-issledovatel'skiy institut  
ekonomiki sel'skogo khozyaystva (for Pankova).  
(Collective farms--Accounting)

KORENYUK, V.I.

Supported by the collective. Vest. sviazi 24 no.3:26-27 M-  
'64. (MIRA 17:4)

KOREMYUK, Yu. M.

Detachability of the slag crust in copper welding under a  
silicate flux. Avtom. svar. 16 no.3:40-44 Mr '63.  
(MIRA 16:4)

1. Institut elektrosvariki imeni Ye. O. Patona AN UkrSSR,

(Copper—Welding) (Slag)

81481

S/125/60/000/05/06/015

18.4000

AUTHORS:

Korenyuk, Yu. M., Didkovskiy, V. P.

TITLE:

Electroslag Casting<sup>4</sup> of Copper and Some Copper Alloy<sup>1</sup> Ingots

PERIODICAL:

Avtomaticheskaya svarka, 1960, No. 5, pp. 44-49

TEXT:

Detailed information is presented on a new casting method developed by the Electric Welding Institute imeni Ye. O. Paton, suitable for special steels, alloys and nonferrous metal. Phosphor-tin-bronze ingots of high quality were obtained, free of the usual defects caused by reverse liquation during crystallization. Copper and "Br. OF 6.5-0.15" bronze was smelted by large-size electrodes in an "A-550" apparatus fed with a-c current of industrial frequency through a "TShS-3000-1" welding transformer. Of the fluoride fluxes tried, the "ANF-5" type (75% CaF<sub>2</sub> and 25% NaF) proved best. Inter-crystalline nonhomogeneity of ingots could be eliminated by annealing during several hours at 700-800°C. Microstructure obtained is shown in photographs, with no traces of reverse liquation. Good copper ingots were obtained with the use of commercial sodium fluoride for flux and argon for protection of the slag bath. The bronze ingots were cold-rolled into 250 mm bands, 0.55 mm thick at the "Krasnyy"

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S/125/60/000/05/06/015

Electroslag Casting of Copper and Some Copper Alloy Ingots

vyborzhets" plant, without any defects in the band, whilst bands rolled for comparison from ingots produced by semicontinuous casting did have defects. The copper alloys experimented with, contained berillium, Zirconium and titanium. High-mechanical properties of the copper ingots obtained are compared with properties of copper cast conventionally (Table 4). There are 6 photographs, 4 tables, and 4 Soviet references.

ASSOCIATION:

Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im. Ye. O. Patona AN USSR (Red Banner of Labor Electric Welding Institute imeni Ye. O. Paton AS UkrSSR)

Card 2/2

37667

S/125/62/000/004/005/013  
D040/D113

1.2300

AUTHOR: Korenyuk, Yu.M.

TITLE: Automatic submerged-arc welding of thick sheet copper

PERIODICAL: Avtomaticheskaya svarka, no. 4, 1962, 26-32

TEXT: Experiments in welding up to 28 mm thick copper using the single-pass automatic submerged-arc process were conducted because of trouble with hot cracks, particularly in thicker metal. The base metal and electrode wires were made of copper with 0.5% Cr and M3 (M3) copper with 0.008-0.01% O<sub>2</sub>, < 0.002% Bi and < 0.01% Pb content. Standard welding equipment and an AN-26 (AN-26) flux were used. It was stated in welding 18-28 mm thick copper that the weld shape ratio is an important factor, and that crack resistance was satisfactory when this ratio was 1.8-2.0. The ratio could be raised by slowing down the welding speed to definite limits, but high plasticity was obtained only at a high welding speed. The observed effect

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S/125/62/000/004/005/013  
D040/D113

Automatic submerged-arc welding ...

of current consumption, arc voltage and wire diameter on the width of welds is discussed and illustrated. Welding with a "split electrode", i.e. two wires in a special welding nozzle which is used in welding aluminum, proved to be an effective means for increasing the weld width and is recommended. A photo of the A-694 (A-694) split-electrode nozzle, designed by Engineer V.A.Smolyarko and used in experiments is included. It is recommended to use 5 mm electrode wire for welding copper of up to 12 mm thickness without bevelling the edges, and to employ a split electrode for thicker metal, though the mechanical properties of welded joints produced by single and by "split" wire are practically the same. Sound welds without slag inclusions and other flaws were obtained. There are 7 figures and 2 tables.

ASSOCIATION: Ordena Trudovogo Krasnogo Znameni Institut elektrosvariki im. Ye.O.Patona AN USSR (Electric Welding Institute "Order of the Red Banner of Labor" im. Ye.O.Paton, AS UkrSSR).

SUBMITTED: July 15, 1961

Card 2/2

KORENYUK, Yu.M.; SHTEYN, R.O.

Mechanical properties of welded joints in BrB2 bronze. Avtom.  
svar. 15 no.6:94 Je '62. (MIRA 15:5)  
(Bronze--Welding)

KORENYUK, Yu.M.

Crack formation during the welding of copper containing bismuth.  
Avtom. svar. 16 no.4:24-26 Ap '63. (MIRA 16:4)

1. Institut elektrosvarki im. Ye.O.Patona AN UkrSSR.  
(Copper—Welding) (Thermal stresses)

NAUMOV, Yu.G. (Kol'chugino); KORENYUK, Yu.M.

Welding flanges to extruded copper pipes. Avtom. svar. 16  
no.7:84-85 J1 '63. (MIRA 16:8)

1. Institut elektrosvarki im. Ye.O. Patona AN UkrSSR (for  
Korenyuk).

(Pipe, Copper-Welding)

KORENYUK, Yu.M.; MANZHELEY, G.P.; RABKIN, D.M.

Reaction between metal and slag during the welding of copper under  
flux. Avtom. svar. 17 no.5:33-39 My '64. (MIRA 17:11)

1. Institut elektrosvarki imeni Patona AN UkrSSR.

PETSHAUFER, A.V., inzh.; MAYLIAN, V.A., inzh.; KORENYUK, Yu.M., inzh.

Welding under flux of 40x50mm copper rings. Svar.proizv. no.5:35-36  
My '65. (MIRA 18:6)

1. Dagestanskiy zavod elektrottermicheskogo oborudovaniya (for  
Petshauf, Maylian). 2. Institut elektrosvarki im. Ye.O.Fatona  
(for Korenyuk).

L 61842-65 ENT(m)/ENP(w)/ENA(d)/EMP(b)/ENP(v)/T/ENP(t)/EMP(k)/ENA(h)/ENA(c)

FF-L/PeB IJP(c) JD/HM/IB/JG

ACCESSION NR: AP5016020

U1/0125/65/000/006/0062/0064

621.791 0 : 621.9-462

AUTHOR: Teytel', I. L. (Engineer, Verkhnyaya Salda); Plastinin, A. I. (Engineer, Verkhnyaya Salda); Korenyuk, Yu. M. (Engineer)

TITLE: Flux welding of thick copper tubes

SOURCE: Avtomaticheskaya svarka, no. 6, 1965, 62-64

TOPIC TAGS: welding technique, weld microstructure, copper alloy, arc welding, tube joint, heat conductivity

ABSTRACT: Copper alloyed with 0.4-1.0% Cr is known to possess good strength at high temperatures, along with its high heat conductivity. In this study, tubes were welded from the above alloy using a vitreous flux. Welding conditions are listed along with pertinent data for single pass arc welding. The dependence of the welding current on metal thickness is linear; this current is lowered when the welding speed is decreased below the maximum possible speed. Arc stability regions are graphically shown on curves relating welding current to electrode diameter. A macrograph of the welded region is presented, along with a photograph of the finish-

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L 61842-65

ACCESSION NR: AP5016020

ed seam. A large dendritic zone was observed next to the base metal. Type AH-26 Flux was used, which was preliminarily heated for 2-3 hrs at 300-400°C, and introduced into the welding arc by compressed air. Some comments are made about the design of the welding apparatus, and particularly about the efficient utilization of the flux. On the opposite side of the seam, some non-metallic inclusions were found. Also, any dirt or oil on the edges of the incoming piece resulted in porosity in the final weld. "The authors are sincerely grateful to Doctor of technical sciences D. M. Rabkin and Engineer Kh. S. Proshchitskiy for extended assistance in the performance of the present work." Orig. art. has: 4 figures.

ASSOCIATION: Institut elektrosyarki im. Ye. O. Patona AN UkrSSR (Institute of Electric Welding, AN UkrSSR)

SUBMITTED: 23Jul64

ENCL: 00

SUB CODE: MM, IE

NO REF SOV: 004

OTHER: 000

Card 2/2

KOREPANOV, A.; BERDNIKOV, V.V.; KADOSHNIKOV, B.A.; KAZANTSEV, D.P., red.;  
VORONTSOVA, Z.Z., tekhn. red.

[Our experience in fattening young cattle] Nash opyt nagula modod-  
nyaka krupnogo rogatogo skota. Izhevsk, Udmurtskoe knizhnoe izd-  
vo, 1960. 16 p. (MIRA 14:12)

1. Zaveduyushchiy Molochno-tovarnoy fermy kolkhoza "Rassvet" Igribsko-  
go rayona (for Korepanov).  
(Cattle--Feeding and feeds)

KOPVILLEM, U.Kh.; KOREPANOV, A.D.

Possibility of the generation and amplification of hypersound in  
paramagnetic crystals. Zhur.eksp.i teor.fiz. #1 no.1:211-213 J1  
'61. (MIRA 14:7)

1. Kazanskiy gosudarstvennyy universitet.  
(Ultrasonic waves) (Nuclear spin)

KOREPANOV, A.G.

~~Hygienic problems involved in self-service in cafeterias. Vop.pit.~~  
15 no.6:49-50 N-D '56. (MIRA 9:12)

(RESTAURANTS,  
cafeterias, hyg. aspects (Rus))

KOREPANOV, A.G.

"Hygiene in public eating establishments" by I.IA.Morcinis. Reviewed  
by A.G.Korepanov. Vop.pit. 16 no.1:87-90 Ja-F '57. (MIRA 10:3)  
(RESTAURANTS, LUNCHROOMS, ETC.--HYGIENIC ASPECTS)  
(MORCINIS, I.A.)

KORSEANOV, A.G., sanitarnyy vrach

Concerning K.S.Silivanik's article on "Current tasks of sanitation control in the planning, construction and operation of standard hospitals." Gig. i san. 22 no.4:59-60 Ap '57. (MIRA 10:9)

1. Iz Perovskoy sanitarno-epidemiologicheskoy stantsii Moskovsko-Ryazanskoy zheleznoy dorogi.  
(HOSPITALS--CONSTRUCTION)

KORPANOV, A.G.

Problem of chilling desserts. Vopr.pit. 17 no.1: 99-100 Ja-F '58.  
(MIRA 11:4)

1. Is Petrovskoy sanitarno-epidemiologicheskoy stantsii  
Moskovsko-Ryazanskoy zheleznoy dorogi  
(REFRIGERATION AND REFRIGERATING MACHINERY)

KORNPANOV, A.G.

"Materials on food hygiene in trade organizations and public eating places" Vop.pit. 17 no.2:82-83 Mr-Ap '58. (MIRA 11:4)

(FOOD HANDLING)

(PUTIAGIN, N.N.) (RIZOVA, S.A.)

KOREPANOV, A.G., sanitarnyy vrach

Teaching minimal sanitation requirements to food workers. Gig.i san.  
23 no.8154-56 Ag '58 (MIRA 11:9)

1. Iz Perovskoy sanitarno-epidemiologicheskoy stantsii Moskovsko-  
Ryazanskoy zheleznoy dorogi.

(FOODHANDLING,

prod., sanit, train. of workers (Rus))

KOREPANOV, A.G.

"Hygiene of public eating establishments" by B. D. Vladimirov.

Reviewed by A.G. Korepanov. Gig. i san. 23 no.11:91-93 N '58

(RESTAURANTS, LUNCHROOMS, ETC.--SANITATION) (MIRA 12:8)

(VLADIMIROV, B.D.)

KOREPANOV, Aleksandr Georgiyevich; BONDAREV, G.I., red.; BALDINA,  
N.F., tekhn. red.

[Sanitary control of food organizations in institutions for  
children and adolescents] Sanitarnyi kontrol' za organizatsiei  
pitaniia v detskikh i podrostkovykh uchrezhdeniakh. Moskva,  
Medgiz, 1961. 142 p. (MIRA 15:4)

(FOOD HANDLING)

KOREPANOV, A.G. (Moskovskaya oblast')

Role of a nurse of a children's or adolescents' institution in the  
sanitary inspection of food. Med. sestra 21 no.4:46-49 Ap '62.

(MIRA 15:4)

(NURSES AND NURSING) (CHILDREN--NUTRITION)  
(FOOD ADULTERATION AND INSPECTION)

KOREPANOV, A.M.

Disorders of functions of the stomach, pancreas, and liver in hypertension. Terap.arkh. 31 no.11:57-62 N '59. (MIRA 13:3)

1. Iz gosspital'noy terapevticheskoy kliniki (zaveduyushchiy - prof. A.Ya. Gubergits) Izhevskogo meditsinskogo instituta.

(HYPERTENSION compl.)  
(LIVER DISEASES etiol.)  
(PANCREAS dis.)  
(STOMACH dis.)

KOREPANOV, A. M., CAND MED SCI, "FUNCTIONAL CONDITION OF  
THE STOMACH, PANCREAS, AND LIVER IN HYPERTENSION PATIENTS."  
DONETSK, 1961. (DONETSK STATE MED INST IMENI A. M. GOR'KIY).  
(KL-DV, 11-61, 228).

-262-

ROZZHIVIN, D.M., dotsent; KOREPANOV, G.F. (Perm')

History of the clinic for general surgery of the Perm Medical  
Institute (1941-1961). Trudy Perm. gos. med. inst. 43:114-120  
'63. (MIRA 17:6)

KOREPANOV, G.Ya., inzh.

Some causes of the flashing over occurring in the collector  
of the NB-412M traction engine. Elek. i tepl. tiaga 7 no.10:30-  
32 0 '63. (MIRA 16:11)

KOREPANOV, G.Ya., inzh.

Contactless recording of potential diagrams of the collectors of  
traction motors. Trudy MIIT no.157:100-111 "62. (MIRA 16:5)  
(Electric railway motors)

USSR / Cultivated Plants. Fodder Crops.

M-5

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58656

Author : Korepanov, K.

Inst : Not given

Title : Fodder Cabbage in the North

Orig Pub : S.-kh. Sibiri, 1957, No 9, 40-41

Abstract : Agricultural engineering of growing fodder cabbage in the north at the Khanta-Mansi agricultural experimental station and some kolkhoz' are given. The yield of cabbage reached 400 cwt/ha. Fodder cabbage withstands frosts of -8 -10° and supplies fresh fodder during the whole autumn. The best yield was provided by the Mozgovaya zelenaya variety. -- V. M. Kashmanova

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KOREPANOV, K.A., kand. tekhn. nauk

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000824620011

Calculating ventilation resistance of mine cars. Ugol' Ukr.  
no.1:20-22 Ja '59.

(MIRA 12:1)

1. Donetskii industrial'nyy institut.

(Mine ventilation)

(Mine railroads--Cars)

KOREPANOV, K.A., kand tekhn.nauk; SKLYAROV, L.A., inzh.

Calculation of the leakage of a rigid air ventilation duct in  
blind development drifts. Izv.vys.ucheb.zav.; gor.zhur. no.4:  
87-91 '60. (MIRA 14:4)

1. Donetskii ordena Trudovogo Krasnogo Znameni industrial'nyy  
institut. Rekomendovana kafedroy rudnichnoy ventilatsii i tekhniki  
bezopasnosti.

(Mine ventilation)

KLEBANOV, F.S., kand. tekhn. nauk; ROSSOCHINSKIY, V.I., inzh.;  
MYASNIKOV, A.A., kand. tekhn.nauk; BARATOV, E.I.,  
kand. tekhn.nauk; MALASHENKO, E.N., inzh.; KOREPANOV,  
K.A., kand. tekhn. nauk; SKLYAROV, A.A., kand. tekhn.  
nauk; SYROYEZHNIKIN, P.V., inzh.; KUKHARSKIY, M.P., inzh.;  
VORONINA, L.D., otv. red.; BERKGAUT, V.G., red.izd-va;  
DOROKHINA, I.N., tekhn. red.

[Improving mine ventilation methods in hydraulic mining]  
Sovershenstvovanie sposobov proveterivaniia vyrabotok  
gidroshakht. [By] F.S.Klebanov i dr. Moskva, Izd-vo AN  
SSSR, 1963. 156 p. (MIRA 16:10)  
(Mine ventilation) (Hydraulic mining)

ARTEMOV, A.V., dotsent, kand. tekhn. nauk; FROLOV, A.V., gornyy inzh.;  
KOREPANOV, K.A., dotsent, kand. tekhn. nauk; MGROZOV, I.F., inzh.

Response to O.I. Charnov's and V.N. Puzrev's article "Gas  
emanation from coal." Ugol' 40 no.11:72-73 '65,

(MIRA 18:11)

1. Novocherkasskiy politekhnicheskii institut (for Artemov,  
Frolov). 2. Donatskiy politekhnicheskii institut (for Korepanov,  
Morenov).

KORMPANOV, N.

Serious claims. Okhr.truda i sots.strakh. no.5:76 N '58.

(MIRA 12:1)

1. Starshiy inzh. upravleniya sel'skogo khozyaystva Kirovskogo  
oblastnogo soveta deputatov trudyashchikheya.

(Tractors—Safety measures)

KOREPANOV, P. D.

Ensilage

Our experience in making ensilage. Korm. baza 3 no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September <sup>1952</sup>~~1953~~. Unclassified.

KOREPANOV, P. D.

7792. KOREPANOV, P. D.---Mekhanizatsiya trudoyemkikh rabot na zhivotnovodcheskikh fermakh. (iz opyta roboty chkal. mts. lit. obrabotka N. I. Shushina i K. A. Tarasovoy). Gor'kiy. kn. 12 D., 1954 47s. s ill. 14 sm. (UPR, s. kh. propagandy i nauki. Peredoviki zhivotnovodstva o svoey opyte). 2.000 EKZ. Bespl.--Na obl.: tol'ko 3-Y avt.--vlozhena s 9-yu drugimi knigami etoy serii v futlyar s zagl. serii.--(55-3953) P 636. 0025 (47.37)

SC: Knizhnaya Letopis', Vol. 7, 1955

AUTHOR: Korepanov, P.I., Director 111-58-6-5/25

TITLE: The Mechanization of Work at the Kiyev Post Office (Mekhanizatsiya proizvodstvennykh protsessov na Kiyevskom pochtamte)

PERIODICAL: Vestnik Svyazi, Nr 6, 1958, pp 6-8 (USSR)

ABSTRACT: This is a description of the new Kiyev Post Office, where all laborious operations have been mechanized. In the main operation room, band conveyers are used for mail transportation. Telegrams and money orders are transported by pneumatic mail system. Telegrams are also transported by band conveyers of combined type from the twenty-four-hour reception room to the control room of the telegraph exchange. Postal loads are transported by elevators to upper floors and mail bags by winding, stepped and inclined chutes to the lower floors, operator's positions and motor-cars. There are 37 conveyers, with a total length of 500 m. An electric car transports mail from room to room, the doors being automatically opened and closed during its passage. An automatic continuously operating device comprising one elevator of 20 kg lifting capacity and six band conveyers, is used for clearing letter boxes and for mail transportation to the sorting room. The Akhtyrskiy zavod (Akhtyrska

Card 1/2

The Mechanization of Work at the Kiyev Post Office

111-58-6-5/25

Plant) of the Ministry of Communications installed two devices for preliminary mail sorting at the post office and is also manufacturing a similar type sorting machine for use in town branch communication offices. A machine of "POM-5" type is used for cleaning mail bags. A 5,400 sq m parking area handles up to 50 motor-cars, the arrival of which is announced by light and sound signals. A great part of the post office work will be controlled by a dispatcher system equipped with two switchboards of the "DKZ-70" type, with 140 numbers each. More than 200 radio points and a 300 electric clock station are fed by a 100 w radio relay station from the post office. An air-conditioning device is installed. Central heating is assured by the "TETs" type heat supply source.

There are 8 photos.

ASSOCIATION: Laboratoriya pochtovoy tekhniki Kiyevskogo pochtamta (The Laboratory of Postal Techniques of the Kiyev Post Office)

Card 2/2

1. Communication systems - USSR
2. Mail - Transportation

6(2)

AUTHOR:

Korepanov, P.I., Chief

SOV/111-59-9-14/31

TITLE:

An Automatically Operating Conveyor Line at the Kiyev Post Office

PERIODICAL:

Vestnik svyazi, 1959, Nr 9, pp 19-20 (USSR)

ABSTRACT:

This item describes an automatically operating conveyor system, 150 m in length, set up at the Kiyev Post Office which connects the main operations hall on the first floor with the sorting division on the third floor. Operation of the conveyor system is outlined in detail with the aid of a diagram of the system. One of the main elements of the system is an automatic lift, the working drawings for which were made in 1955 at the Laboratory of the Kiyev Post Office. Manufacture and assembly of the parts was done by S. D. Polyakov, F.I. Artem'yev, V.I. Voyko and M.S. Garanin, workers at the Laboratory. The electrical system was developed by I.S. Yakubovich, engineer at the Laboratory. The system, states the author, guarantees a smooth flow of correspondence to the sorting division

Card 1/2

SOV/111-59-9-14/31

An Automatically Operating Conveyor Line at the Kiyev Post Office

and an increase in labor productivity of 5 times.  
There is 1 pictorial diagram.

ASSOCIATION: Laboratoriya pochtovoy tekhniki kiyevskogo pochtamta  
(Postal Engineering Laboratory of the Kiyev Post  
Office)

Card 2/2

83651

16.9500

S/111/60/000/009/001/001  
B002/B060

AUTHORS: Korepanov, P. I., Chief Engineer  
Martinson, K. P., Efficiency Expert

TITLE: Automatic Conveyor Lines at the Kiyev Post Office

PERIODICAL: Vestnik svyazi, 1960, No. 9, p. 20

TEXT: The first automatic conveyor line was installed at the Kiyev Post Office two years ago, and seven more have been added by now. These lines convey the incoming mail to the respective floors (including deliveries to the telegraph and pneumatic post departments). The conveyor lines switch on and off automatically, basing on a plan by the efficiency expert, K. P. Martinson. By a lever, a conveyed container closes a contact, and the following conveyor line is set in motion for some time. The duration of propulsion depends on how large the capacitor and the resistor are chosen to be in the relay (Fig.). When the relay of the type ПТЕ-4 PC4520150 (RPB-4 RS4520150) was used along with a 20 $\mu$ F electrolytic condenser and a 200 k $\Omega$  resistor as well as a selenium rectifier of the type ABC-25 (AVS-25), the working time was about

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APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000824620011

Automatic Conveyor Lines at the  
Kiyev Post Office

S/111/60/000/009/001/001  
B002/B060

15 seconds. From 60 to 75% of electric energy is saved by the automatic switching on and off. There is 1 figure.

ASSOCIATION: Kiyevskiy pochtamt (Kiyev Post Office)

Card 2/2

41

SOSKIN, G.B.; KOREPANOV, P.I.

Experience in the operation of a semiautomatic mail sorting system. Vest. aviatsi 20 no. 12:15 D '60. (MIRA 13:12)

1. Glavnyy konstruktor proyekta Tsentral'nogo konstruktorskogo byuro Ministerstva svyazi SSSR (for Soskin). 2. Glavnyy inzhener Kiyevskogo pochtanta (for Korepanov).  
(Kiev--Postal service)

KOREPANOV, S.; PUTILOV, B., red.; GOLOBOKOVA, L., tekhn. red.

[Zone of the blue flame] Zona golubogo ognia. Sverdlovsk,  
Sverdlovskoe knishnoe izd-vo, 1962. 45 p. (MIRA 16:4)  
(Sverdlovsk—Machinery industry)

SOV/133-58-8-13/30  
AUTHORS: Teterin, P.K., Klyamkin, N.L., Candidates of Technical  
Sciences and Musorina, I.Ye., Korepanov, S.P.,  
Sominiski, Z.A., and El'bert, S.M., Engineers

TITLE: The Production of Two-layer Soldered Tubes (Proizvodstvo  
dvusloynnykh payanykh trub)

PERIODICAL: Stal', 1958, Nr 8, pp 722 - 726 (USSR)

ABSTRACT: The process of production of two-layer soldered tubes was developed by TsNIIChM and tested on the Sinarskiy Pipe Plant. The tubes are made from a cold-rolled steel strip coated on both sides with a thin layer of copper. The edges of the strip are bevelled and the strip is formed into a two-layer tube semis with a close contact of the layers and overlapping of edges (Figure 1). The tube semis are passed through an electric furnace, heated to a temperature somewhat higher than the melting temperature of copper. The heating and cooling is done in a protective atmosphere. During the heating, soldering of the layers along the whole contact surface takes place. Thus, the manufacturing process consists of four main operations: copper coating of strip, bevel cutting of edges, forming of strip into tube semis and soldering. This kind of tube is being produced within a range of diameters from 6 to 16 mm with

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## The Production of Two-layer Soldered Tubes

SOV/133-58-8-13/30

the wall thicknesses from 0.6 to 0.9 mm. Low-carbon, mild steel (08) cold-rolled strip, 0.3 - 0.45 mm in thickness supplied in an annealed state in coils of a width corresponding to the required diameter of the tubes is used as a starting material. The strip is electrolytically coated with copper to a thickness of  $4\mu$ ;  $1\mu$  of copper is deposited from the cyanide electrolyte and  $3\mu$  from an acid electrolyte. The coating process is continuous (Figure 2, table). The speed of strip through the electrolytic baths varies from 2.85 to 9.65 m/min, depending on its width. Cutting of edges is done in one pass without liquid cooling of knives. The rate of cutting up to 65 m/min (Figures 3 and 4). Forming of strip according to scheme shown in Figure 5 is done on a continuous 14-stand mill (Figure 6) produced by TsKBMM TsNIITMASH at a rate of 30-45 m/min. Formed semis are cut into a measured length (14 100 mm). Lots of 30 semis are passed for soldering in an electric resistance furnace (Figure 7) consisting of two chambers: heating and cooling. The temperature of the heating chamber is maintained at  $1130 - 1140^{\circ}\text{C}$ . The rate of

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SCV/133-58-8-13/30

# The Production of Two-layer Soldered Tubes

passage through the furnace varies from 0.78 to 2.0 m/min, depending on the tube diameter. Protective atmosphere is obtained from charcoal gas producer (CO 31-37%,  $H_2$  7-11%,  $CH_4$  0.2-0.7%,  $CO_2$  1-4%, humidity 7-10 g/m<sup>3</sup>). In order to retain a uniform distribution of copper on the surface of tubes during soldering, the latter are coated with a thin layer of a special coating material (not specified) before soldering. It is stated that the mechanical properties of tubes are similar to those of seamless tubes from mild steel (tensile strength 38-42 kg/mm<sup>2</sup>, relative elongation 24-30% and pass the hydraulic test according to GOST 301-50). It is pointed out that the process of production of the above tubes is already introduced into practice. It presents significant, technical and economic advantages in comparison with the drawing process. Such tubes can replace

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The Production of Two-layer Soldered Tubes

SOV/133-58-8-13/30

successfully steel seamless tubes as well as copper and brass tubes, thus providing a large saving of non-ferrous metals.

There are 7 figures and 1 table.

ASSOCIATION: TsNIICHM and Sinarskiy trubnyy zavod (Sinarskiy Pipe Plant),

Card 4/4

1. Pipes--Production 2. Steel--Coatings 3. Furnaces--Applications

KOREPANCV, S. T.

KOREPANCV, S. T.--Rules of Chain Gearing. (Geometry, Kinematics, and Force Calculation). \* Leningrad Polytechnic Inst imeni M. I. Kalinin, Leningrad, 1954, (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No. 35, 1955

KOREPANOV, S.T., kand. tekhn. nauk

Determining the circumference diameter of star-wheel curves of chain drive transmissions. Izv. vys. ucheb. zav.; mashinostr. no.9:68-78 '64. (MIRA 17:12)

1. Leningradskiy institut aviatsionnogo priborostroyeniya.

TAL'YANSKIY, I.; SHTRAYKHER, A.; KOREPANOV, V.; MEDVEDEV, S.

Universal record players and long-playing records. Radio no.8:11 Ag '53.  
(MIRA 6:8)

(Phonograph records) (Phonograph)

L 30351-66 EWT(1) IJP(c) GD

ACC NR: AT6014770

SOURCE CODE: UR/0000/64/000/000/0134/0160

AUTHOR: Korepanov, V. D.; Chernitsyn, A. I.

ORG: none

TITLE: Nuclear magnetic relaxometer

SOURCE: Paramagnitnyy rezonans (Paramagnetic resonance); sbornik statey, Kazan, Izd-vo Kazanskogo univ., 1964, 134-160

TOPIC TAGS: nuclear relaxometer, magnetic relaxometer, spin relaxation, spin echo

ABSTRACT: Essentially, the article consists of two parts: (1) A review of the spin echo phenomenon and its use in measuring relaxation and self-diffusion time and (2) A description of a spin-echo relaxometer developed by the authors in 1959-61. In the review, the fundamental methods of E. L. Hahn (Phys. Rev., v. 80, 580, 1950) and H. Y. Carr et al. (Phys. Rev., v. 94, 630, 1954) and also their later improvements and modifications are considered. In the new relaxometer (see figure), the relaxation time  $T_2$  is measured by the Hahn method ( $\pi/2 - \pi$ ) and the  $T_1$  time, by application of a pulse series  $\pi/2 - \pi - \pi/2 - \pi$ . The necessary repetition frequency is taken from the oscilloscope 1-f oscillator (the 1-f pulses control timer 4 which produces square pulses). Transmitter 6 turns timer video pulses into r-f pulses; their frequency depends on the permanent-magnet 8 field strength. Transmitter pulses are applied to measuring head 7 in whose coil they create a pulsed r-f field; the same coil receives (over cable 13) nuclear induction signals

Card 1/3

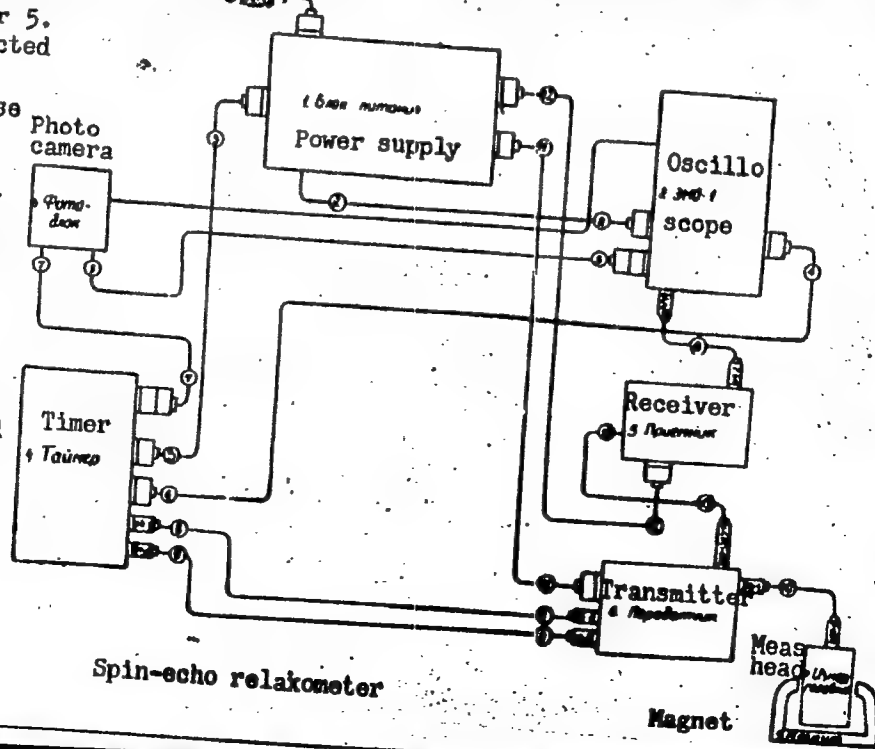
L 30351-66

ACC NR: AT6014770

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000824620011-7

applied to receiver 5. Amplified and detected signals are fed to oscilloscope 2 whose picture can be photographed by camera 3. Each component of the above system is described in some detail, functional and time-sequence diagrams are shown, and their operation explained. The field strength of the permanent magnet is about 4000 gs with an irregularity of 2 gs within 2 cm<sup>3</sup>.



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L 30351-66  
ACC NR: AT6014770

Sample oscillograms of  $T_1$  and  $T_2$  measurements are shown. "The authors wish to thank S. N. Medvedev who took part in the development of the scheme." Orig. art. has: [03]  
25 figures and 17 formulas.

SUB CODE: 18 / SUBM DATE: 04Jun64 / ORIG REF: 006 / OTH REF: 010 / ATD PRESS: 5016

Card 3/3 00.

24 (0)

AUTHORS:

Korepanov, V. D., Dautov, R. A.,  
Padeyev, V. M.

SOV/56-37-1-52/64

TITLE:

Measurement of the Transversal Proton Relaxation Time in Aqueous Solutions of Paramagnetic Salts by Means of the Spin Echo Method (Izmereniye vremeni poperechnoy protonnoy relaksatsii v vodnykh rastvorakh paramagnitnykh soley metodom spinovogo ekho)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 1, pp 308 - 309 (USSR)

ABSTRACT:

By means of the spin echo method it is possible to determine the absolute values of the longitudinal and transversal relaxation times  $T_1$  and  $T_2$  experimentally, especially in liquids of low viscosity. The authors of the present "Letter to the Editor" give a report about  $T_2$ -measurements by means of an experimental arrangement which is not described. The measurements were carried out at a frequency of 12.2 megacycles in a constant magnetic field, the r. f. magnetic field (amplitude  $\sim 3.7$  Oe) was applied to the sample in form of two successive short square pulses (16 and 32  $\mu$ sec), warranting a nutation of the magnetic

Card 1/2

Measurement of the Transversal Proton Relaxation Time in Aqueous Solutions of Paramagnetic Salts by Means of the Spin Echo Method

SOV/56-37-1-52/64

polarization of the water protons to 90 and 180° respectively. The delay between the pulses could be varied between 0.3 and 2  $\mu$ sec. In the case of the experimentally obtained times of the order of  $T_2 \sim 10^{-3}$  sec, self-diffusion of water molecules in the highly inhomogeneous field was neglected. The results obtained by the  $T_2$ -measurements of the protons of water for a  $\text{Fe}(\text{NO}_3)_3$ -solution in dependence on its pH value are shown by a diagram. With increasing pH value, the curve shows an exponential ascent (pH = 2.5,  $T_2 > 3 \mu$ sec). The results are briefly discussed. The authors finally thank A. A. Popel' and A. I. Rivkind for discussions. There are 1 figure and 4 references, 1 of which is Soviet.

ASSOCIATION:

Kazanskiy gosudarstvennyy universitet (Kazan' State University)

SUBMITTED:

March 25, 1959

Card 2/2

KOREPANOV, V.D.; CHERNITSYN, A.I.; DAUTOV, R.A.

Spin echo in a local field. Zhur. eksp. i teor. fiz. 45 no.2:  
385-386 Ag '63. (MIRA 16:9)

1. Kazanskiy gosudarstvennyy universitet.  
(Nuclear spin) (Magnetic fields)

L 1314-66 EWT(1)/EPF(c) IJP(c) WW/CG  
ACCESSION NR: AR5014398

UR/0058/65/000/004/D038/D038

SOURCE: Ref. zh. Fizika, Abs. 4D285

AUTHOR: Koloskova, N. G.; Korepanov, V. D.; Kochelayev, B. I.

TITLE: Shape of the curve for the nuclear induction signal

CITED SOURCE: Sb. Itog. nauchn. konferentsiya Kazansk. un-ta za 1962 g. Kazan', Kazansk. un-t, 1963, 4-5

TOPIC TAGS: nuclear physics, nuclear resonance, resonance absorption, resonance line

TRANSLATION: The authors propose an explanation for the oscillating decay in the nuclear resonance signal based on the resonance absorption line  $g(\nu)$  in the form  $g(\nu) = A(\alpha^2 - \nu^2)^p$ , where  $A$  and  $\alpha$  are constants. The curve for  $g(\nu)$  is rectangular at  $p = 0$  and Gaussian at  $p = \infty$ . Methods are given for finding the parameters  $A$ ,  $p$  and  $\alpha$ . R. Yul'met'yev.

SUB CODE: NP

ENCL: 00

Card 1/1

L 1302-66 EWT(m)/EPF(c)/EWP(t)/EWP(b) LJP(c) JD/JW

ACCESSION NR: AR5014399

UR/0058/65/000/004/D042/D043

SOURCE: Ref. zh. Fizika, Abs. 4D324

AUTHOR: Korepanov, V. D.; Kirillov, Ye. I.; Chernitsyn, A. I.

TITLE: Equipment for measuring relaxation times of fluorine nuclei by the pulse method in the 0.3-300°K range

CITED SOURCE: Sb. Itog. nauchn. konferentsiya Kazansk. un-ta za 1962 g. Kazan', Kazansk. un-t, 1963, 5-6

TOPIC TAGS: fluorine, radioisotope, relaxation process, cadmium fluoride, crystal

TRANSLATION: Electronic equipment is described for measuring the relaxation times  $T_2$  and  $T_1$  of  $F^{19}$  nuclei in  $CaF_2$  crystals by the pulse method. A general block diagram of the equipment is given together with the receiver and transmitter circuits. A device is examined for creating temperatures down to 0.3°K. A high frequency head is described for studying the specimen. Methods for measuring temperatures are given.

SUB CODE: NP, SS

ENCL: 00

Card 1/1

L 1137-66 EWT(d)/EWT(1)/EWT(m)/EWP(w)/EPP(c)/EEC(k)-2/EPP(n)-2/T/EWP(t)/EWP(b)  
TJP(c) JD/WW/GG

ACCESSION NR: AP5016389

UR/0120/65/000/003/0139/0141

539.1.078:539.19

AUTHOR: <sup>44,55</sup> Korepanov, V. D.; <sup>44,55</sup> Chernitsyn, A. I.; <sup>44,55</sup> Shvets, A. D.

TITLE: Equipment for investigating NMR at temperatures down to 0.3K <sup>44,55</sup>

SOURCE: Pribery 1 tekhnika eksperimenta, no. 3, 1965, 139-141 <sup>21,44,55</sup>

TOPIC TAGS: NMR, low temperature research, low temperature physics

ABSTRACT: The equipment for obtaining near-0.3K temperatures was described in PTE, 1962, no. 3, 198. A temperature of 1.2-15K is attained by exhausting liquid-He<sup>3</sup> vapor in a cryostat; the vapor condenses in a dewar vessel. The condensate is further evaporated, with the vapor adsorbed by a carbon pump, which brings the final temperature down to 0.315K for 4 hours or more. NMR can be measured on He<sup>3</sup> nuclei in liquid, gas, and solid specimens. The same outfit permits measuring NMR at 4.2-1.4K, 20.4-14K, and 77-63K. NMR is studied by a pulse method, with a 4-μsec 90° pulse and a receiver passband of 100-200 kc; the resonance frequency of F<sup>19</sup> nuclei is 13.5 Mc. "The authors wish to thank S. A. Shaginaga and Ye. I. Kirillov for their great help in building and mounting the equipment."

Orig. art. has: 2 figures. <sup>44,55</sup>

Card 1/2 <sup>44,55</sup>

L 1137-66

ACCESSION NR: AF5016389

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan' State University);  
Fiziko-tekhnicheskii institut AN UkrSSR, Khar'kov (Physico Technical Institute,  
AN UkrSSR) 44556

SUBMITTED: 07 May 64

ENCL: 00

SUB CODE: TD, NP

NO REF SOV: 005

OTHER: 000

Card 2/2 90

L 64699-65	EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c)	DIAAP/IJP(c)	JD/JG/GG
ACCESSION NR: AR5012275		UR/0058/65/000/003/D052/D052	
SOURCE: Ref. zh. Fizika, Abs. 3D398			47 B
AUTHOR: Dautov, R. A.; Korepanov, V. D.; Chernitsyn, A. I.	44.55	44.55	
TITLE: Effect of temperature on relaxation of $F^{19}$ nuclei in a synthetic $CaF_2$ single crystal	19.44.55		
CITED SOURCE: Sb. Itog. nauchn. konferentsiya Kazansk. un-ta za 1962 g. Kazan', Kazansk. un-t, 1963, 14-15	24.44.55	19.44.55	
TOPIC TAGS: calcium fluoride, single crystal, crystal impurity, gadolinium, relaxation process, low temperature effect			
TRANSLATION: Relaxation of $F^{19}$ nuclei is experimentally studied in a $CaF_2$ single crystal with trivalent gadolinium ( $Gd^{3+}$ ) impurity (concentration of the order of $10^{-3}$ ). Measurements were made by the pulse method at a frequency of 13.5 Mc from room temperature to 0.317°K. A. Kokin.			
SUB CODE: SS, NP	ENCL: 00		
Cord 1/1			

L 61659-65

ACCESSION NR: AR5015979

UR/0058/65/000/005/D063/D063

SOURCE: Ref. zh. Fizika, Abs. 5D466

AUTHORS: Korepanov, V. D.; Chernitsyn, A. I.

TITLE: Nuclear magnetic relaxometer

CITED SOURCE: Sb. Paramagnitn. rezonans. Kazan', Kazansk. un-t, 1964, 134-160

TOPIC TAGS: relaxometer, nuclear magnetic relaxometer<sup>10</sup> spin echo, molecular self diffusion, relaxation time

TRANSLATION: The authors describe a nuclear magnetic relaxometer which is manufactured commercially. The instrument makes it possible to measure the times of longitudinal and transverse relaxation  $T_1$  and  $T_2$  and the coefficient of molecular self-diffusion  $D$  by the spin-echo method.  $T_2$  was measured by the Hahn method (pair of  $90^\circ$  and  $180^\circ$  pulses), while  $T_1$  was measured by applying to the sample a sequence of radio-frequency pulses at  $90^\circ$ -- $180^\circ$ -- $90^\circ$ -- $180^\circ$ . The instrument circuit differs from the known instruments in that it includes an automatic programming device -- a timer which generates, in accordance with a prescribed program, pulses for the modulation of the high-frequency generator during the measurement of  $T_1$  and  $T_2$ . The spin-echo phenomenon, the condition for its production, and the methods for mea-

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L 61659-65  
ACCESSION NR: AR5015979

uring  $T_1$  and  $T_2$  and D are briefly considered; the instrument, the operating principle, and the construction of the magnet are described in detail. Illustrations, diagrams and a complete set of electric circuits are included. V. Kolbasov.

SUB CODE: KP

ENCL: 00

Card 2/2 *jlt*

25688  
S/181/61/003/007/010/023  
B102/B214

24.7900

AUTHORS: Kopvillem, U. Kh., and Korepanov, V. D.

TITLE: The appearance of hypersonics on saturation of paramagnetic resonance in crystals

PERIODICAL: Fizika tverdogo tela, v. 3, no. 7, 1961, 2014-2022

TEXT: On saturation of paramagnetic resonance in crystals the population difference  $\Delta n_{ab} = n_a - n_b$  of an energy-level pair ( $E_a < E_b$ ) of magnetic ions can become negative. If a weak variable magnetic field of amplitude  $H$  and frequency  $\omega_{ba} = \hbar^{-1}(E_b - E_a)$  acts on this crystal, a radiation (photon production on account of magnon annihilation) is induced, which exceeds the induced absorption. Thus, the magnetic field is amplified, or a variable electromagnetic field is generated if there exists no external  $H$  field. Theoretical investigations of S. A. Al'tshuler (ZHETF, 28, 38, 49, 1955) as well as experimental studies show that on excitation of a paramagnetic crystal by hypersonics of frequency  $\omega_{ba}$  and amplitude  $A$ ,

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B102/B214

The appearance of hypersonics ...

there occurs a forced production and annihilation of magnons and phonons (instead of the photons). What has been said above holds if only one says "phonon" instead of "photon" and "A" instead of "H" (A - amplitude of lattice vibrations). If magnetic as well as hypersonic excitation exists, there take place different interference effects in the crystal, which can be used for the indication of electromagnetic and sound fields. The object of the theoretical investigations described here was to classify the effect and estimate its order of magnitude. A nonequilibrium state of a spin system, caused by the saturation of paramagnetic resonance is considered, where the self-excitation of hypersonics in the crystal is possible at the cost of the energy of an alternating field. Parameters are introduced by which the conditions for the appearance of the reversepiezo-magnetic effect can be determined. Taking into account the existing theories and the experimental results on acoustic magnetic resonance and on the change of constants of the crystal field by pressure, the piezo-magnetic parameters of a number of crystals including electronic, nuclear, and mixed spin systems are estimated. The values obtained for the sound quality factor  $Q_3$  are given in a table.  $Q_3$  is defined by  $Q_3 = [FC]^{-1} \omega_{ba} = [2\chi_f]^{-1} \rho \omega_{ba}^2$ , where

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B102/B214

The appearance of hypersonics ...

$Q$  is the crystal density,  $C$  the sonic velocity in the crystal in the  $x$ -direction, and  $F$  is the sound-absorption coefficient of the spin  $H$  system.

Further,  $Q_3 = \text{constant} \frac{T\Delta}{\Theta v}$  for  $S > 1/2$ , and  $Q_3 = \text{constant} \frac{T\Delta}{\Theta v^3}$  for  $S = 1/2$  and for

rare-earth ions. The quantum-mechanical "temperature",  $T$ , for level pairs is determined from the relation  $\Delta n_{ab} / (n_a + n_b) = \tanh(h\nu_{ba} / kT)$ .  $S$  is the effective spin of the paramagnetic ion,  $\Delta$  is the half-width of the line in frequency units, and  $\Theta$  is the concentration of magnetic ions in the crystal. At the present level of experimental technique, hypersonics can be excited as a result of interaction between crystal lattice and electronic or nuclear spin in magnetic ions. Finally, the indication of electromagnetic and sound fields by means of interference phenomena is briefly discussed. First of all, the production of hypersonics having frequencies  $> 10^{10}$  cps is discussed. Using a klystron with  $\nu \sim 10^{11}$  cps and the harmonic cross relaxation, a negative population difference ( $|E_a - E_b| \sim 3h\nu$ ) can be created on the levels and sound of the corresponding frequency generated. The change of the amplification factor of the amplitude  $H$  on the levels

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S/181/61/003/007/010/023  
B102/B214

The appearance of hypersonics ...

$E_a$  and  $E_p$  due to self-excitation is used for the indication of hypersonics. The reverse process is analogously used for the indication of the electromagnetic field. The authors thank S. A. Al'tshuler for a discussion. There are 1 table and 28 references: 9 Soviet-bloc and 19 non-Soviet-bloc. The most important references to English-language publications read as follows: N. Bloembergen. Phys. Rev., 104, 324, 1956; M.W.P.Strandberg. Phys. Rev. 111, 1268, 1958; E. H. Jacobsen et al. Phys. Rev. Lett., 2, 81, 1959.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina (Kasan' State University imeni V. I. Ul'yanov-Lenin)

SUBMITTED: February 10, 1961

Card 4/6

0320  
S/056/61/041/001/015/021  
B102/B214

24.1800(1137, 1144, 1482)

AUTHORS: Kopvillem, U. Kh., Korepanov, V. D.

TITLE: The possibility of generation and amplification of ultrasonics in paramagnetic crystals

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 41, no. 1(7), 1961, 211-213

TEXT: In this paper the interaction between a nonequilibrium paramagnetic spin system and crystal lattice is investigated theoretically; the conditions in which the spin-lattice interaction leads to the excitation or amplification of ultrasonics in crystals are studied. The authors start from the theory of S. A. Al'tshuler (ZhETF, 28, 38, 49, 1955) which has been verified experimentally (E.H. Jacobsen et al. Phys. Rev. Lett., 3, 81, 1959). According to this theory phonons can be produced or annihilated in paramagnetic crystals under the action of ultrasonics of frequency  $\nu_{ba} = (E_b - E_a)/h \sim 10^{10}$  cps on account of annihilation and production of magnons. The operator describing the interaction of the

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S/056/61/041/001/015/021  
B102/B214

The possibility of generation and ...

magnetic ion i with the variable magnetic field (R-H) and the sonic field is:

$$\mathcal{H}_i = \cos(\omega_m t) R \sum_{j=1}^N [\langle a | \mathcal{H}^j | b \rangle + \langle b | \mathcal{H}^j | a \rangle] \quad (3)$$

Here t is time, R amplitude,  $R \langle a | \mathcal{H}^j | b \rangle$  the matrix element of the transition of ion i between the states  $\langle a |$  and  $| b \rangle$  under the action of the perturbation  $\mathcal{H}_i$ . The imaginary part of the susceptibility and the quality factor of the crystalline sound generator are given by:

$$\chi_R = (2NV)^{-1} \Delta n_{ab} |\langle a | \mathcal{H}^j | b \rangle|^2 g(\nu_{ba}), \quad (4)$$

$$Q_H = (4\pi\chi_H \eta)^{-1}, \quad Q_A = \omega_m^{-1} Fc = (2\chi_A \eta)^{-1} \rho \omega_m^2.$$

where  $\eta$  is the population factor, F the sound absorption coefficient,  $\rho$  the crystal density, c the velocity of sound in the crystal,  $g(\nu_{ba})$  the normalized form factor of the absorption curve of the magnetic or acoustic energy due to the spin system, and V the volume of the crystal.  $Q_A$  is estimated for a  $\text{Ni}^{2+}$  ion in  $\text{NiSiF}_6 \cdot \text{H}_2\text{O}$  in the presence of a static field

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25h20

S/056/61/C41/001/015/021  
B102/B214

The possibility of generation and ...

$H_0$  perpendicular to the symmetry axis (z) of the crystal. One obtains:

$$Q_A \sim T(2S+1) k_B \Delta c_z^2 [2\pi\nu_{ba} N^* \alpha_{33}^2 | \langle a | S_z^2 | b \rangle |^2]^{-1} (\partial D / \partial X_{zz})^{-1} = 6.38 \cdot 10^{11} T / \nu_{ba} \quad (5)$$

where  $k$  is the Boltzmann constant,  $N^*$  the number of  $Ni^{2+}$  ions per  $cm^3$ ,  $S$  the spin,  $\Delta$  the width of the line of magnetoacoustic resonance,  $\alpha_{33}$  the elastic constant, and  $T$  the temperature. The following constants are computed:

$$c_z^2 = 2.5 \cdot 10^{11} (cm/sec)^2, N^* = 4 \cdot 10^{21}, \rho = 2.08 g/cm^3$$

$$\alpha_{33} = 0.5 \cdot 10^{12} dyne/cm^2, \Delta = 3.2 \cdot 10^9 cps,$$

$$(\partial D / \partial X_{zz}) = -3.37 \cdot 10^{-26} erg \cdot cm^2 / dyne, | \langle a | S_z^2 | b \rangle |^2 = 10^{-1}.$$

The Ni-Ni distance in the lattice is assumed to be 6.27 Å. For  $T = 1^{\circ}K$  and  $\nu_{ba} = 10^{10}$  cps one obtains  $Q_A \approx 63.8$ . A significantly smaller value is obtained for Cr ions. To illustrate the above, some possible models of ultrasonic generators and amplifiers working with  $NiSiF_6 \cdot 6H_2O$  are

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S/056/61/041/001/015/021  
B102/B214.

The possibility of generation and ...

discussed when  $H_0$  is parallel to the trigonal crystal axis ( $z$ ). Calculations show that in many cases it is easier to realize the conditions for phonon production than those of photon production at the expense of the energy of the spin system. The possibility of the use of nonequilibrium spin system for the detection of acoustic or electromagnetic signals is also discussed. This is accomplished by the method of doubled magneto-ultrasonic resonance in the presence of a strong variable magnetic field. The authors thank S. A. Al'tshuler for discussions. There are 6 references: 2 Soviet-bloc and 4 non-Soviet-bloc.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan' State University)

SUBMITTED: January 31, 1961

Card 4/4

KOPVILLEM, U.Kh.; KOREPANOV, V.D.

Appearance of hypersound at the saturation level of paramagnetic resonance in crystals. Fiz.tver.tela 3 no.7:2014-2022 J1 '61.  
(MIRA 14:8)

1. Kazanskiy gosudarstvennyy universitet imeni V.I.Ul'yanova-Lenina.  
(Paramagnetic resonance and relaxation)  
(Nuclear spin) (Crystal lattices)

L 17216-63

EWI(1)/EWI(m)/BDS AFPTC/ASD

ACCESSION NR: AP3005299

S/0056/63/045/002/0385/0386

AUTHORS: Korepanov, V. D.; Chernitsy\*n, A. I.; Dautov, R. A.

TITLE: Spin echo in local field

SOURCE: Zhur. eksper. i teoret. fiz., v. 45, no. 2, 1963, 385-386

TOPIC TAGS: spin echo, local field, paramagnetism, ferromagnetism, low temperature

ABSTRACT: Spin echo of  $F^{19}$  nuclei was observed in the inhomogeneous field of the paramagnetic ions  $Gd^{3+}$ , present in the form of an impurity with approximate concentration 0.01% in the single-crystal  $CaF_2$  under study. The effect was absent at room and liquid-nitrogen temperatures and was easily observable at 4.2°K. An echo signal due to internal inhomogeneities is normally not observed, except in ferromagnets where the local field is produced by electrons. The amplitude of the echo signal is much smaller than that of free pre-

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L 17216-63  
ACCESSION NR: AP3005299

cession, and the width, characterizing the local field, decreases from 3-40 G at 0.3°K to 20-30 G at 4.2°K. No pronounced anisotropy of the width was observed. "The authors are grateful to U. Kh. Kopvillem for pointing out the possibility of the investigated phenomenon. They are also grateful to A. D. Shvets for constructing the cryostat, to L. D. Livanova for growing the single crystal, and to S. A. Al'tshuler for discussions and for interest in the work." Orig. art. has 1 figure.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan' State University)

SUBMITTED: 08May63

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: PH

NO REF SOV: 000

OTHER: 002

Card 2/2

KORPANOV, Ya.A. [deceased].

"The Moscow Sea" by A.V. Gaveman. Izv. Vses. Geog. ob-va 89 no.2:  
167-169 Nr-Ap '57. (MIRA 10:6)

(Moscow Reservoir)

KOREPANOVA, A.V.

USSR/Cultivated Plants - Potatoes. Vegetables. Melons.

M-3

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91671

Author : Korepanova, A.V.

Inst : Scientific Research Institute for Agriculture in the Extreme North.

Title : The Vernalization of Potatoes in Ditches.

Orig Pub : Dyul. nauchno-tekhn. inform. N.-1. in-ta s. kh. Krayn. Severa, 1957, No 3, 41-42.

Abstract : The Khanty-Mansiyskaya Agricultural Experimental Station established the possibility of successful vernalization of potatoes in ditches 25-30 cm deep and 130 - 150 cm wide with the potatoes stacked in layers of 2 - 3 tubers. The duration of vernalization was 15 - 18 days. In the experiments of the Station the potato yields with vernalization in ditches and racks was identical and totalled 175 - 184 centner/hectare. -- G.N. Chernov.

Card 1/1

KOREPANOVA, E.F.

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000824620011

Cytology of the secretion of the female urethra. Akush. i gin. 34  
no.3:100-101 My-Je '58. (MIRA 11:6)

1. Iz akushersko-ginekologicheskoy kliniki (zav. kafedroy - prof. A.V.Khokhlov) Izhevskogo meditsinskogo instituta.  
(URETHRA, physiol.  
secretion in female, cytol. exam. (Bus))

CA

KOREPANOVA, G. Ya.

11E

Production and incubation characteristics of eggs from hens on different diets. Kh. F. Kushnir, G. Ya. Korepanova, and V. N. Bukin (A. N. Bakht Inst. Biochem. and Inst. Genetics, Acad. Sci. U.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 72, 1191-4(1950).—Hens fed with added vitamins A, B<sub>1</sub>, and D<sub>3</sub> with full-valued or with low-protein diets, showed the advantages of the vitaminized diet; especially on otherwise balanced feed in respect to continued high level of egg productivity in winter months. Their eggs also showed a significantly higher content of A and B<sub>1</sub> vitamins than in other groups. A better egg fertility was also indicated. G. M. K.

KORFANOVA, G. Ya. *Food. Biological Sci*

"Effect of Feeding Conditions on the Breeding Characteristics of Hens."  
Sub 29 Dec 51, Inst of Genetics, Acad Sci USSR.

Dissertations presented for science and engineering degrees in Moscow  
during 1951.

SO: Sum. No. 480, 9 May 55

GT-SFL No. 45

Kushner, Kh.V. and Korepanova, G.Ya. (Institute of Genetics, U.S.S.R. Academy of Sciences).  
The effect of the intensity of feeding of productive roosters on the quality of the descendants.  
875-B

Akademiyu Nauk S.S.S.R., Doklady Vol. 70 No. 5 1951

KORSEPOVA, G. YA.

Variation (Biology); Poultry - Feeding and Feeding Stuffs

Hereditary changes in chickens as a result of feeding conditions.  
Agrobiologia. no. 2, 1952

SO: Monthly List of Russian Accessions, Library of Congress, July 195<sup>2</sup>, Uncl.

1. KOREPANOVA, G. YA.
2. USSR 600
4. Poultry Breeding
7. Experiment in contrast feeding of hens through two generations, Trudy Inst. gen, No. 19, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

1. KUSHNER, Kh. F.; KOREPANOVA, G. YA.
2. USSR 600
4. Poultry Breeding
7. Effect of the intensiveness of feeding of breeding cocks on the quality of the progeny, Trudy Inst. gen, No. 19, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KOREPANOVA, G.Ya.

Inheritance of anatomical and morphological characteristics of growth of internal organs and tissues of birds in connection with varying feeding conditions. Trudy Inst.gen. no.20:197-209 '53. (MLBA 7:1)  
(Birds) (Heredity)

KOREPANOVA, G. Ya.

Hereditary changes in the productivity of hens under the influence of conditions. Vit.res. 1 ikh.isp. no.2:223-244 '54. (MIRA 8:10)

1. Institut genetiki Akademii nauk SSSR.  
(Poultry)

GUBERGITS, A.Ya., prof., zasl. deyatel' nauki Udmurtskoy Avtonomnoy SSR, otv. red.; ~~VORONCHIKHIN, S.F.~~, zasl. deyatel' nauki Udmurtskoy Avtonomnoy SSR, red.; GAZIZOV, A.M., red.; ZARAYSKAYA, A.A., red.; ~~MAMAYEV, A.N.~~, red.; ~~ORESHKOV, T.N.~~, zasl. vrach Udmurtskoy Avtonomnoy SSR, red.; ~~ODIYANKOV, G.A.~~, red.; ~~RUPASOV, N.F.~~, red.; ~~SOMOVA, V.I.~~, red.; ~~KOREPANOVA, L.V.~~, red.; ~~MASHAGATOV, V.F.~~, kand. med. nauk, red.; ~~VORONTSOVA, Z.Z.~~, tekhn. red.

[Problems in the pathology of the biliary tract; collected scientific works of the First Republic Clinical Hospital] Voprosy patologii zhelchnykh putei; sbornik nauchnykh trudov 1-i Respublikanskoi klinicheskoi bol'nitsy. Izhevsk, Udmurtskoe knizhnoe izd-vo, 1960. 222 p. (MIRA 15:3)

1. Zaveduyushchiy terapevticheskimi klinikami Izhevskogo meditsinskogo instituta (for Gubergits). 2. Terapevticheskaya klinika Izhevskogo meditsinskogo instituta (for Oreshkov, Mashagatov). 3. Zaveduyushchiy fakul'tetom khirurgicheskoy kliniki Izhevskogo meditsinskogo instituta 1-oy Respublikanskoy klinicheskoy bol'nitsy Ministerstva zdravookhraneniya Udmurtskoy Avtonomnoy SSR (for Voronchikhin). 4. Fakul'tet khirurgicheskoy kliniki Izhevskogo meditsinskogo instituta 1-oy Respublikanskoy klinicheskoy bol'nitsy Ministerstva zdravookhraneniya Udmurtskoy Avtonomnoy SSR (for Odiyankov).

(BILIARY TRACT--DISEASES)

KOREPANOVA, N. V.

KOREPANOVA, N. V. -"The biological gluing of skin scraps in the free transplantation of skin". Gor'kiy, 1955. Gor'kiy State Medical Inst imeni S. M. Kirov.  
(Dissertation for the degree of Candidate Medical Sciences).

SO: Knishnaya Letonia №. 46, 12 November 1955. Moscow

KOREPIN, Ye.A., Cand Tech Sci -- (diss) "Theoretical and experimental study of piezoelectric transformers of accelerometers." Len 1958, 14 pp (Min of Higher Education USSR. Len Polytechnic Inst im M.I. Kalinin) 150 copies, Bibliography at end of text (17 titles) (KL, 42-58, 115)

- 32 -

SVIRIDOV, A.P.; KOREPIN, Ye.A.; BISTROV, A.I.; KARPOV, V.G.; BARASHKOV, S.K.

Supersound projector equipped with Y-cut quartz piezoelectric cells.  
Izv.vys.ucheb.sav.; prib. no.1:34-37 '59. (MIRA 12:11)

1. TSentral'naya nauchno-issledovatel'skiya laboratoriya mestnoy  
promyshlennosti Leningradskoy oblasti.  
(Ultrasonic waves---Industrial applications)

9(2)

SOV/115-59-4-13/27

AUTHOR:

Korepin, Ye.A.

TITLE:

Wide-Band Piezoelectric Transducers for Accelerometers (Shirokopolosnyye p'yezoelektricheskiye preobrazovateli dlya akselerometrov)

PERIODICAL:

Izmeritel'naya tekhnika, 1959, Nr 4, pp 22-25 (USSR)

ABSTRACT:

The author presents formulae for the calculation of piezoelectric transducers of accelerometers. The data required for the calculations are listed in table 1 for quartz, Rochelle salt, barium titanate, etc. For these piezoelectric materials, the author furnishes formulae for calculating the natural frequency and the sensitivity to acceleration. In several diagrams, methods for glueing piezoelectric elements are shown. The author investigates briefly the errors possible with such transducer systems. There are 5 diagrams, 1 graph, 4 tables and 2 Soviet references.

Card 1/1

BARASHKOV, Sergey Konstantinovich; BYSTROV, Anatoliy Ivanovich; KARPOV, Vladimir Gavrilovich; KOREPIN, Yevgeniy Andreyevich; SVIRIDOV, Anatoliy Petrovich; MIKHALEV, B.Ye., inzh., red.; FREGER, D.P., red. izd-va; GVIETS, V.L., tekhn. red.-

[Ultrasonic radiator made from barium titanate ceramics for technological applications] Izluchateli ul'trazvuka iz keramiki titanata bariia dlia tekhnologicheskikh primenenii. Leningrad, 1960. 18 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriya: Elektricheskie metody obrabotki materialov, no.1)

(MIRA 14:11)

(Ultrasonic waves)

PHASE I BOOK EXPLOITATION

SOV/5229

Korepin, Yevgeniy Andreyevich, Candidate of Technical Sciences

P'yezoelektricheskiye preobrazovateli akselerometrov (Piezoelectric Converters of Accelerometers) Leningrad, 1960. 23 p. 5,500 copies printed. (Series: Leningradskiy dom nauchno-tekhnicheskoy propagandy. Obmen peredovym opytom, no. 39. Seriya: Pribory i elementy avtomatiki, vyp. 5)

Sponsoring Agencies: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSPSR and Leningradskiy dom nauchno-tekhnicheskoy propagandy.

ED.: B. Ye. Mikhalev, Engineer; Ed. of Publishing House: D. P. Freger; Tech. Ed.: V. L. Gvirtz.

PURPOSE: This booklet is intended for technical personnel concerned with the automation of industrial processes.

COVERAGE: The booklet contains a detailed description of piezoelectric converters of accelerometers. Their advantages over other

Card ~~1/3~~

S/887/61/000/000/006/069  
E073/E155

AUTHORS: Babikov, O.I., Koropin, Ye.A., Mikhalev, B.Ye., and Belyayev, Yu.V.

TITLE: Piezoelectric ultrasonic radiator.  
(A.c. no. 117326, cl. 42s (no.598828 of April 28, 1958)).

SOURCE: Sbornik izobreteniy, ul'trazvuk i yego primeneniye.  
Kom. po delam izobr. i otkrytiy. Moscow, Tsentr. byuro  
tekhn. inform., 1961, 14-15

TEXT: A cylindrical piezoelectric ultrasonic radiator is proposed for effective cleaning of the internal surfaces of components (for instance internal surfaces of tubes) in cleaning baths. This consists of a radially polarised piezo-element designed as a hermetically sealed hollow cylinder. This design of radiator ensures that only the outer surface emits ultrasonics. The radiator (Fig.10) consists of a cylindrical, hollow piezo-element, the body 2, the lid 3 and the components which supply the piezo-element. Sealing gaskets ensure hermetic sealing of the internal cavity of the radiator. Deformation of the insulating and sealing gaskets is prevented by flat springs. The silver  
Card 1/3

Piezoelectric ultrasonic radiator

S/887/61/000/000/006/069  
E073/E155

coating of the radiator is protected by a layer of vinyflex. The proposed radiator is economical and convenient in use. It has been acknowledged useful by the Akusticheskiy Institut AN SSSR (Acoustics Institute, AS USSR). There is 1 figure.

[Abstractor's note: Complete translation.]

Fig.10.

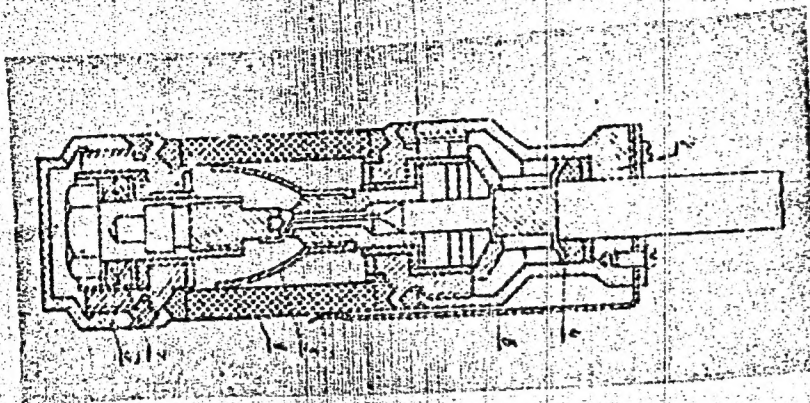
- 1 - piezoelectric projector; 2 - body; 3 - lid;
- 4 - cable; 5 - spring contact; 6 - contact plate;
- 7 - flat springs.

Card 2/3

Piezoelectric ultrasonic radiator

S/887/61/000/000/006/069  
E073/E155

Fig.10



Card 3/3

KOREPOV, V.G.

An iterative method for solving the complete eigenvalue problem.  
Ukr. mat. zhur. 14 no.3:328-329 '62. (MIRA 15:9)  
(Eigenvalues) (Matrices)

PODOL'SKIY, Yu.Yu. (Moskva); KOREPOVA, I.V. (Moskva); VINOGRADOV, G.V.  
(Moskva)

Conditions and kinds of seizing caused by the friction of hardened  
steel in hydrocarbon lubricating media. Mashinovedenie no.5:109-  
114 '65. (MIRA 18:9)